

WHAT IS CLAIMED IS:

1. An image forming apparatus comprising:  
a first contacting unit which is contacted with respect  
5 to an image carrier along a predetermined weight direction; and  
a second contacting unit which is contacted with respect  
to the image carrier in a wrap shape, wherein  
the predetermined weight direction by the first contacting  
unit is intersected with the wrap-shaped contact range by the  
10 second contacting unit.

2. The image forming apparatus according to claim 1,  
wherein  
the second contacting unit is provided on the downstream  
15 side of a pivotal rotation direction of the image carrier with  
respect to the first contacting unit.

3. The image forming apparatus according to claim 1,  
wherein  
20 the first contacting unit is a member capable of  
maintaining a distance between the image carrier and a developing  
agent carrier for developing an elastic latent image formed on  
the image carrier.

25 4. The image forming apparatus according to claim 3,

wherein

the first contacting unit is provided in a developing device in which a plurality of the developing agent carriers are provided on a circumference thereof, and is a tracking member  
5 capable of maintaining the distance between a specific developing agent carrier and the image carrier when the developing device is pivotally rotated and thus the specific developing agent carrier is located opposite to the image carrier.

10           5.     The image forming apparatus according to claim 1,  
wherein

the second contacting unit is an elastic belt which is followed by receiving driving force produced from the image carrier.

15           6.     The image forming apparatus according to claim 5,  
wherein

the second contacting unit is contacted to the image carrier under predetermined depression force.

20           7.     The image forming apparatus according to claim 1,  
wherein

the second contacting unit is an intermediate transfer member which temporarily holds thereon a toner image formed on  
25 the image carrier by the developing agent carrier.

8. An image forming apparatus comprising:

an image carrier;

a developing device for developing an electrostatic latent

5 image formed on the image carrier; and

an intermediate transfer member for abutting against the image carrier so as to temporarily hold thereon a toner image formed by being developed by the developing device, wherein

the developing device is comprised of a positioning member  
10 which abuts against the image carrier, and a weight direction by the positioning member to the image carrier is located within an abutting range between the intermediate transfer member and the image carrier.

15 9. The image forming apparatus according to claim 8, wherein

the intermediate transfer member is made of an elastic belt, and abuts with respect to the image carrier under such a condition that the image carrier is wrapped only over a  
20 predetermined range by the intermediate transfer member.

10. The image forming apparatus according to claim 9, wherein

the intermediate transfer member is followed by receiving  
25 driving force produced from the image carrier.

11. The image forming apparatus as claimed in claim 8,  
wherein

the developing device holds a plurality of developing agent  
5 carriers along a circumferential direction thereof, and is  
pivotally rotated in such a manner that a desirable developing  
agent carrier among the plural developing agent carriers is  
transported to a developing position located opposite to the  
image carrier.

10

12. The image forming apparatus according to claim 11,  
wherein

the positioning member employed in the developing device  
is a tracking member capable of maintaining an interval between  
15 each of the developing agent carriers and the image carrier in  
a constant value.

13. The image forming apparatus according to claim 8,  
wherein

20 the image carrier is a photosensitive drum having an axial  
center.

14. An image forming apparatus comprising:  
an image carrier;

25 a developing device for developing an electrostatic latent

image formed on the image carrier, and being contacted to the image carrier in predetermined weight; and

an intermediate transfer member which is contacted to the image carrier in predetermined weight and holds thereon a toner  
5 image which has been developed to be formed by the developing device, wherein

the image forming apparatus owns such a portion that both a straight line and a weight direction of the developing device with respect to the image carrier become a substantially straight  
10 line, while the straight line connects a contact point of the intermediate transfer member to the image carrier to a center of the image carrier.

15. The image forming apparatus according to claim 14,  
15 wherein

an eccentricity of the image carrier is suppressed by both the intermediate transfer member and the developing device.

16. The image forming apparatus according to claim 14,  
20 wherein

the intermediate transfer member is made of an elastic belt, and is contacted to the image carrier via either a line or a plane.

25 17. The image forming apparatus according to claim 14,

wherein

the developing device is contacted to the image carrier at a preselected portion in order to keep a distance of the own developing device located opposite to the image carrier constant.

5

18. The image forming apparatus according to claim 17, wherein

the developing device is contacted to the image carrier at a non-image forming portion, and contacted toward a substantially center direction of the image carrier in predetermined weight..

19. An image forming apparatus comprising:

an electrostatic latent image forming unit for forming an electrostatic latent image on an image carrier;

a developing unit in which a plurality of developing rollers are provided along a circumferential direction thereof in order to develop the electrostatic latent image formed by the electrostatic latent image forming unit to thereby form a toner image, and a desirable developing roller is transported to a developing position located opposite to the image carrier; and

a transferring unit which abuts against the image carrier in a wrap shape, and temporarily holds thereon the toner image formed on the image carrier, wherein

an extension of a line which connects a center of the image carrier to a center of the desirable developing roller located opposite to the image carrier is positioned within a range where the transferring unit abuts against the image carrier in a wrap  
5 shape.

20. The image forming apparatus according to claim 19,  
wherein

the developing unit employs a member capable of maintaining  
10 an interval between the developing agent carrier and the image carrier in a constant value in correspondence with each of the developing agent carriers.

21. The image forming apparatus according to claim 20,  
15 wherein

the member employed in the developing unit depresses the image carrier along a predetermined direction when positioning of the developing agent carrier for executing the developing operation is carried out with respect to the image carrier.  
20

22. An image forming apparatus comprising:

an electrostatic latent image forming unit for forming  
an electrostatic latent image on an image carrier;

a developing unit in which a plurality of developing agent  
25 carriers are provided along a circumferential direction thereof

in order to develop the electrostatic latent image formed by the electrostatic latent image forming unit to thereby form a toner image, and a desirable developing agent carrier is pivotally rotated to a developing position located opposite to  
5 the image carrier; and

a transferring unit which abuts against the image carrier in a wrap shape, and temporarily holds thereon the toner image formed on the image carrier, wherein

in the developing unit, when the desirable developing agent  
10 carrier is pivotally rotated to the developing position, a predetermined member abuts against the image carrier via a predetermined trail; and a direction along which the predetermined member depresses the image carrier via the trail is located within a range where the transferring unit abuts  
15 against the image carrier in a wrap shape.

23. The image forming apparatus according to claim 22, wherein

the predetermined member is a tracking roller which abuts  
20 against the image carrier within a non-developing range, and determines an interval between the image carrier and the developing agent carrier.

24. The image forming apparatus according to claim 22,  
25 wherein



the predetermined member is provided in correspondence with all of the developing agent carriers provided in the developing unit; and when each of the developing agent carriers is located opposite to the image carrier, a direction along which  
5 the predetermined member depresses against the image carrier is located within the range where the transferring unit abuts against the image carrier in the wrap shape.

25. An image forming apparatus comprising:

10 an electrostatic latent image forming unit for forming an electrostatic latent image on an image carrier;

a developing unit in which a plurality of developing agent carriers are provided along a circumferential direction thereof in order to develop the electrostatic latent image formed by  
15 the electrostatic latent image forming unit to thereby form a toner image, and a desirable developing agent carrier is pivotally rotated to a developing position located opposite to the image carrier; and

a transferring unit which abuts against the image carrier  
20 in a wrap shape, and temporarily holds thereon the toner image formed on the image carrier, wherein

in the developing unit, when the desirable developing agent carrier is separated from the developing position, a predetermined member is separated from the image carrier via  
25 a predetermined trail; and a direction along which the

predetermined member depresses the image carrier via the trail  
is located within a range where the transferring unit abuts  
against the image carrier in a wrap shape.

5           26.    A method of holding an image carrier comprising the  
steps of:

          abutting with respect to a pivotally rotated image carrier  
along a predetermined direction so as to depress the image  
carrier;

10           depressing the image carrier via a center shaft of the  
image carrier in predetermined weight along a direction opposite  
to the predetermined direction; and

          stably holding the image carrier based upon both the  
depression made along the predetermined direction and the  
15   depression made along the direction opposite to the predetermined  
direction.

          27.    The image carrier holding method according to claim  
26, wherein

20           the depression along the predetermined direction is  
realized by abutting with respect to the image carrier from a  
circumferential portion of the image carrier in a wrap shape  
within a predetermined range so as to depress the image carrier.

25           28.    The image carrier holding method according to claim

27, wherein

the opposite direction corresponds to such a direction along which the depression is made from the circumferential portion toward the center shaft within a range at the  
5 circumferential portion of the image carrier, which is formed by an extension of such a straight line passing through the abutting range in the wrap shape and the center shaft.